REMARKS

Claims 39-49 and 51-69 are pending in the application. Claims 39-43, 49, 51, 56, 57, 59-61, and 67-69 are amended and claim 50 is cancelled. Reconsideration and allowance of the application in light of the amendments and arguments herein are respectfully requested.

Interview Summary

On February 5, 2008, the undersigned attorney conducted a telephonic interview with examiner James Blackwell. Claim 68 was discussed, along with US patent publication no. 2004/0060011 A1 to Nitta, et al. ("Nitta") and US patent publication no. 2004/0090468 to Cruikshank, et al ("Cruikshank"). Claim 60 was discussed along with USPTO guidelines on claiming computer readable media. No agreement was reached. Applicants thank the examiner for his time in discussing the application.

Prior Art Rejection

Claims 49-67 and 69 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Cruikshank. Claims 39-48 and 68 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nitta in view of Cruikshank. Reconsideration of the rejections of claims 39-49 and 51-69 is respectfully requested

As amended, independent claims 39, 49, 57, 60, 68 and 69 include features nowhere shown, described or suggested in the prior art of record. The independent claims have been amended to more clearly define method and apparatus employing two data paths or two types of data for projecting a preview image or printing an image. For example, independent claim 39 includes a projection mechanism to project a preview image. The projection of the preview image is based on (1) raw image data received at an input port of the device, or (2) a composite image file which is produced by an image editor based on the raw image data. Thus a first data path proceeds directly from the input port to the projection mechanism. A second data path also includes the image editor, between the input port and the projection mechanism. The projection

mechanism uses a first data type, raw data, or a second data type in the form of the composite image file, to project the preview image.

Similarly, amended independent claim 49 includes receiving binary image data and using a first type of data, the received binary image data, to print images to a medium. The method also includes manipulating the binary image data to produce a second type of data, edited image data and using the edited image data to print the composite image onto a medium.

Amended independent claim 57 is similar. It includes means for receiving binary image data defining one or more images. In a first data path, a means for converting converts the received binary image data into displayable image data and a means for printing prints the one or more images. In a second data path, a means for manipulating the binary image data produces edited image data and the means for converting converts the edited image data into displayable image data, a means for producing produces a composite preview image and the means for printing then prints the composite preview image. Independent method claim 60 includes similar limitations.

Amended independent claim 68 is also similar. Claim 68includes an input port to receive binary image data defining a plurality of images. A first data path includes a print preview projection mechanism, a displayable data generator and a projection mechanism to project the plurality of images. A second data path adds the image editor, which produces edited image data which is then provided to the displayable data generator. The displayable data generator, in turn, produces displayable edited image data which is then used by the projection mechanism to project an image. An exemplary embodiment is shown in FIG. 2 of the application.

Similarly, amended independent claim 69 includes receiving a first type of data, binary image data, which defines one or more images. The received binary image data is used to print one or more images onto a medium. Edit operations are performed on the received binary image data to produce a second type of data, edited image data. The edited image data is used to print a selected page format or page layout.

Neither Nitta nor Cruikshank, taken alone or in combination, discloses all the features of the presently claimed invention. Nitta shows a device for previewing an image such as a poster or graphic on a surface such as a wall before printing. Cruikshank discloses a kiosk that allows viewing, editing and printing multiple images as part of a poster. Neither discloses or suggests

two data paths or data types. Accordingly, the present claims recite features nowhere shown in the cited references.

Further, the invention defined by claims 39-49 and 51-69 is not obvious in view of Nitta and Cruikshank. By implementing two data paths or data types in this manner, the claimed device and method provide a unique solution for a printing apparatus and method. For example, there is a need to a relatively low-cost device for printing images from a source such as a digital camera. A computer combined with a printer can be expensive to buy and tedious to operate and will have full data processing capability which is unnecessary for such a limited purpose. A printer combined with a display such as a CRT or LCD also becomes unduly expensive. Instead, the presently claimed invention adds a feature of projecting an image on a surface, in a process using relatively simple optics combined with a light source, for example. Such a device and method provide advantages of being easy to use and inexpensive to implement with a device such as a printer. The use of two data paths or two data types makes possible this low-cost device and method with preview image projection.

Moreover, there is no motivation to combine the disclosure of Nitta and Cruikshank to produce the claimed invention. As explained above, the present invention is motivated by a desire to provide an inexpensive, easy to use system and method for previewing images, including multiple images in a composite, before printing. Nitta fails to show processing or combining multiple images. Cruikshank allows combining multiple images, but uses a computer plus monitor plus a printer to achieve this function (see Cruikshank FIG. 2, computer 22, monitor 16 and printer 42, 44). However, a computer and monitor represent exactly the expensive and tedious to use apparatus that the present invention seeks to avoid. A skilled artisan, seeking to solve the problem outlined in the Background section, would not look to a computer plus monitor as taught for the poster kiosk of Cruikshank.

Additional Claim Amendments

Independent claim 60 and dependent claims 61 and 67 have been amended to better conform to USPTO guidelines for claims reciting computer readable media. As amended, the recited computer readable medium "tangibly embodies" computer readable content.

Several claims have been amended to clarify that one result of the claimed device or method is <u>printing</u> of an image on a medium, such as paper. Any ambiguity that may have been perceived in the recitation of "rendering" an image is therefore eliminated.

With this response, the application is believed to be in condition for allowance. Should the examiner deem a telephone conference to be of assistance in advancing the application to allowance, the examiner is invited to call the undersigned attorney at the telephone number below.

Respectfully submitted,

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